



**VA**  
HEALTH  
CARE

Defining  
**EXCELLENCE**  
in the 21st Century

# **State of the Science Meeting: Blast-Induced Tinnitus**

Nov 15-17, 2011

Lucille Beck, PhD  
Chief Consultant, Rehabilitation Services  
Department of Veterans Affairs



# Tinnitus

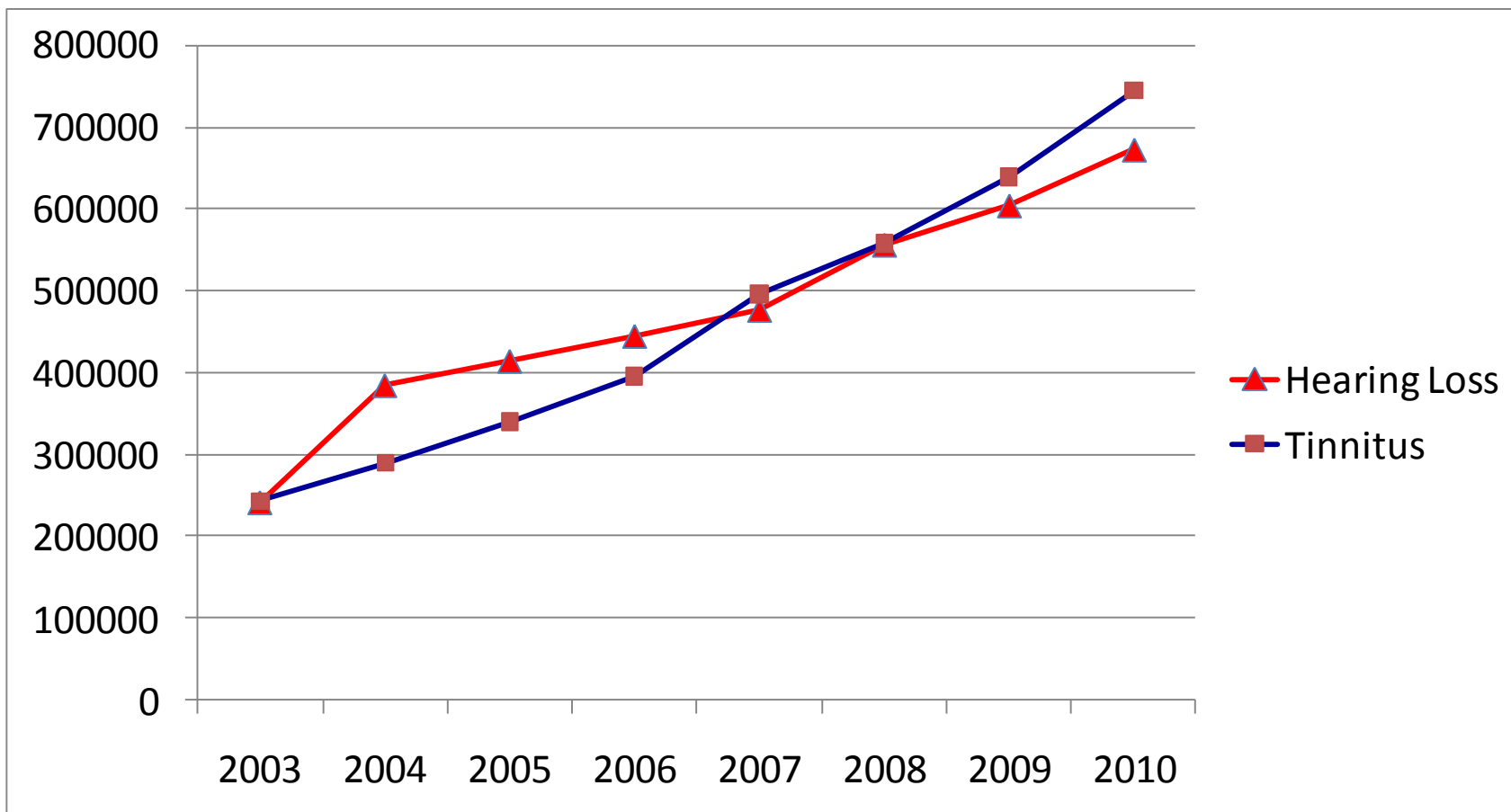
- Most commonly associated with hearing loss, noise exposure, ear disease, traumatic brain injury (TBI), other trauma (to ear, head), many medical conditions, and medications
- Most common service-connected disability overall, and among the most common disabilities for Veterans receiving compensation of all eras since WWII. In 3<sup>rd</sup> Quarter FY 2011:
  - 812,202 Veterans were service connected for tinnitus
  - Tinnitus is top ranked disability among OEF/OIF/OND Veterans
- Recurrent tinnitus is a compensated disability rated at 10% as a subjective complaint, related to any condition, whether perceived in one or both ears



**VA**  
HEALTH  
CARE

Defining  
**EXCELLENCE**  
in the 21st Century

## Compensation Trends (FY03-10)





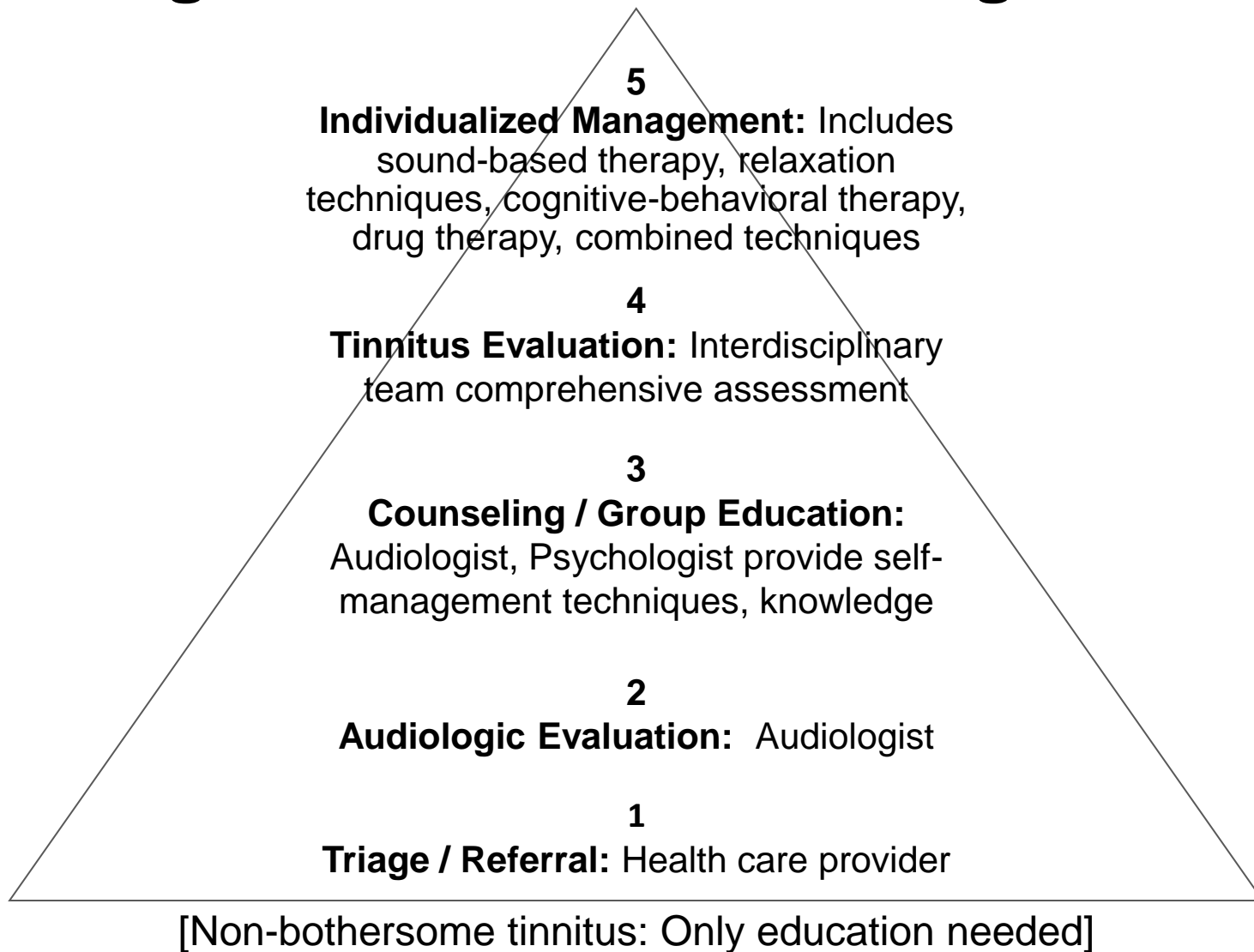
## **Tinnitus – Treatment**

- No cure for tinnitus, although many Veterans with hearing loss and tinnitus obtain benefit from amplification (hearing aids)
- Most Veterans with tinnitus complaints do not require intensive management, but only information and education about condition
- Some interventions have been documented to reduce handicapping effects of tinnitus, although effectiveness varies among individuals, and no one treatment has been shown to be effective in all patients
- VA Audiology Clinics use the Progressive Treatment Management developed by VA National Center of Rehabilitative Auditory Research, consisting of a five-level progressive approach to management



# Progressive Tinnitus Management

←— (less) Severity of Tinnitus Problems (more) —→





## Current VA Research

- Centralized Tinnitus Management for TBI Patients
  - Telehealth study to assess an adaptation of PTM in assisting Veterans who have experienced TBI and also have bothersome tinnitus
- Development of Automated Test to Assess Presence of Tinnitus – the Tinnitus Perception Test (TPT)
  - Preliminary project to assess two procedures to improve the effectiveness of the TPT: (1) detection of tinnitus or not, and (2) pitch-matching
  - Currently being beta-tested at four VA Audiology clinics so that modifications can be made to optimize the clinical test
- Randomized Multi-Site Clinical Study to Evaluate Progressive Intervention Program for Tinnitus Management
  - Goal: Evaluate the efficacy of group intervention in the PTM model